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ASSESSMENT OF MANAGEMENT AND DOCUMENTATION SYSTEMS FOR THE
BOWLING GREEN STATE UNIVERSITY AMERICAN SOCIETY FOR QUALITY
STUDENT BRANCH

Sara K. Murphy

A Thesis

Submitted to the Bowling Green
State University in partial fulfillment of
the requirements for the degree of

MASTER OF TECHNOLOGY MANAGEMENT

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Committee:

Dr. John W. Sinn, Advisor

Dr. Alan Atalah

ABSTRACT

Dr. John W. Sinn, Advisor

The Bowling Green State University (BGSU) American Society for Quality (ASQ) student branch seeks to provide current and prospective students the opportunity to expand or build upon current and evolving quality principles. This project seeks to provide the ASQ student branch the opportunity to develop documented systems of daily operations and other activities in relation to the defined BGSU ASQ student branch organizational objectives. The research associated with this project will provide detailed information related to the organizational requirements to aid in the development of documented systemic procedures. The information also indicates what practices should be in place to ensure all documented procedures are utilized and maintained in a manner that allows the individuals involved the ability to review accurate information reflecting the current state and objectives of the organization. This project and all related research will publish the BGSU ASQ student branch documents that will outline all organizational activities and related functions. The information is intended to be accessible by leadership members and also faculty/advising individuals.

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I would also like to thank the members who supported the Bowling Green State University American Society for Quality (ASQ) student branch organizational improvement projects. I would like to especially thank the BGSU ASQ leadership members Shaoying Yao, Sergey Yun, and Ahoud Alwarsh for working with me on the student branch activities and development.

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CHAPTER I: INTRODUCTION

Overview

Chapter one provides an overall introduction of the proposed research project. The Bowling Green State University (BGSU) American Society for Quality (ASQ) Student Branch will be described to provide a high-level overview and understanding of the background and purpose of the student organization. In addition to the depiction of the BGSU ASQ student branch, this chapter will also describe the general background and requirements of all BGSU student organizations. The project objectives and the problem statement will be introduced to define the correlation between the necessity of the study and the proposed project conclusions and outcomes.

Need for Study

The study is aimed to identify and define the current processes associated with the BGSU ASQ student branch. The definition and outlining of procedural processes is a critical factor for multiple organizations. Industries today are developing new systems to aid in the improvement of the industries' documentation systems. "A study on the improvements of new product development procedure performance – an application of design for Six Sigma in a semi-conductor equipment manufacturer" described the criticality of the procedural development in relation to New Product Development (NPD) processes.

Shortening product development cycle, improving product quality while reducing cost, and responding to customer demands promptly, have long become the prerequisites for the manufacturing industry to maintain competitiveness. A well-defined NPD procedure performance evaluation system is crucial to the measurement of the effectiveness of an NPD procedure. Evaluating the NPD

procedure performance can assist the cooperation to understand and gauge the superiority and inferiority of the business and can also help the cooperation in planning for a strategic vantage over competitors (Jou, 2010, p. 5574).

The development of procedural management systems contribute to the increased amount of competitiveness associated with an organization. The BGSU ASQ student branch will become more successful as a result of the procedural management process and related developmental tools that are to be put in place.

Background of BGSU Student Organizations

Student organizations at Bowling Green State University seek to provide students the opportunity to form a club or group to achieve a predefined common goal that is agreed upon by all members. A student organization allows individuals the opportunity to gain the necessary knowledge in the specified area. For example, a student organization may be formed to allow students the ability to plan and develop a necessary change or modification to a pre-existing condition or process. The Bowling Green State University American Society for Quality student branch also shares the common theme of other student organizations – working towards the achievement of a defined goal or to change an undesirable pre-existing process or condition.

Background of BGSU ASQ Student Organization

The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies (Ilikchyan & Sinn, 2012). The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.

The student branch was created to provide an opportunity for students to further their knowledge in the area of quality systems engineering methodologies. The student branch also expanded the opportunity to colleges located near BGSU. Owens Community College and Terre Community College students also have the opportunity to gain knowledge in the area of quality systems and engineering methodologies.

The BGSU ASQ student branch is affiliated with the Toledo ASQ professional organization section. The structure of the student branch is self-established by the BGSU ASQ leadership team. This structure works with the designated faculty staff support members to ensure the organization establishes effective goals and completes the necessary activities and/or tasks to achieve these goals. The organization seeks to continue to understand the evolving methodologies of quality principles and communicate these concepts to the members in an effective and resourceful fashion.

Background of Problem

The purpose of the development and focus on the Bowling Green State University (BGSU) American Society for Quality (ASQ) student branch is to better understand the associated procedures and also the roles and responsibilities of leadership and support members. The outlining and documentation of these procedures will ensure the effectiveness and robustness of the upcoming BGSU ASQ student branch members. In addition to identifying current procedures of the organizations' leadership and support members, the project also seeks to identify what activities are associated with the success of the organization. The activities are intended to contribute to the defined BGSU ASQ student branch objectives.

The BGSU ASQ student branch does not currently have documented systems or procedures in place. The project focuses on understanding what the procedures are and also

outlining and defining the roles of leaders and members. An article titled “Why Projects Fail” indicates common causes related to failures of a project. These failures can be associated with the aforementioned characteristics of the problem. Some noted causes listed within this article include the following:

1. Lack of formality in the scope definition process results in vagueness and different people having different understandings of what is in and what is out of scope
2. Vague or open ended requirements
3. Requirements are defined by an intermediary without directly consulting or involving those who will eventually use the product being produced (see also lack of stakeholder engagement above)
4. Individual requirements are never vetted against the project’s overall objectives to ensure each requirement supports the project’s objective and has a reasonable Return on Investment (ROI)
5. The project requirements are written based on the assumption that everything will work as planned. Requirements to handle potential problems or more challenging situations that might occur are never considered
6. Failure to broker agreement between stakeholders with differing perspectives or requirements.
7. Failure to take into account non-functional requirements when designing a product, system or process (especially performance requirements) results in a deliverable that is operationally unusable
8. Failure to maintain control over document or component versions results in confusion over which is current, compatibility problems and other issues that disrupt progress

9. Failure to put in place appropriate tools for organizing and managing information results in a loss of key information and/or a loss of control (Calleam Consulting Ltd., 2014).

The listed causes are attributes that will be considered throughout the development of the procedures to mitigate the risks associated with project failures.

Statement of Problem

The problem for this study is to assess current management and documentation systems in place for the Bowling Green State University (BGSU) American Society for Quality (ASQ) student branch, determine inadequacies, and provide improvements to systems where needed.

Significance of the Study

The current situation of the BGSU ASQ student organization is not ideal. Quality improvement projects have been applied to the student branch to aid in the development and growth of the organization and its' members. However, the initial and evolving processes have not been properly defined through a procedural and controlled system. In current corporate processes, it is critical to ensure ideal processes are documented to ensure all activities are completed as required. This philosophy is also to be applied to the BGSU ASQ student branch to ensure the highest quality of the program.

The project will address the procedural insufficiencies identified within the student organization. The completion of the study will identify and improve the following attributes:

1. Development of the procedural documents to provide all impacted students and faculty members the ability to understand BGSU ASQ student branch processes and related activities.

2. Accessibility of the documents for students and faculty members involved with the BGSU ASQ student organization.
3. Provide the BGSU ASQ student organization a system to ensure the maintainability of the documentation systems.

Project Objectives

The project objectives have been created through the thorough analysis of the project strategies and development procedures. The objectives of the project are defined as follows:

1. Definition of the Bowling Green State University American Society for Quality (ASQ) student branch leadership roles and responsibilities.
2. Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) student branch systems and related activities.
3. Build BGSU ASQ student branch membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.
4. Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) student branch documented procedures.
5. Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.

Chapter I Summary

Chapter I: Introduction described the general overview of the project including the purpose of conducting this research project, the background of the organizations both local and

global, the initial statement of the problem, and the outlined project objectives. Chapter I also indicated the significance of conducting this study.

Definition of Abbreviations

The abbreviations listed below include the correlating definitions:

ASQ: Abbreviation for American Society for Quality. A global community made up of professional members offering and obtaining related quality information.

BGSU: Abbreviation for Bowling Green State University. A public university located in Bowling Green, Ohio.

DMAIC: Abbreviation for Define-Measure-Analyze-Improve-Control; Quality tool utilized to complete various projects.

KPI: Abbreviation for Key Performance Indicator. This is commonly used to provide an outline of process goals against a set criteria.

OPCP: Abbreviation for Ongoing Process Control Plan. This is a quality tool that is used to outline the processes and develop control plans for each process and sub process.

QS: Abbreviation for Quality Systems. A collection of related quality tools applicable to manufacturing and business systems.

SIPOC: Abbreviation for Supplier Input Process Output Customer. This is a quality tool that is commonly used to outline process components, outputs, and the end supplier.

SOP: Abbreviation for Standard Operating Procedure. This is a document that outlines step-by-step procedures associated with a process or system.

CHAPTER II: REVIEW OF LITERATURE

Overview

Chapter II: Review of Literature seeks to define the components related to the project objectives and strategies. Historical perspectives are described in the areas of student organizations at the university and also past research conducted in relation to the BGSU ASQ student branch. Other philosophies will be described additionally to ensure the correlation between engineering concepts and the procedural system developments are defined.

American Society for Quality (ASQ) Global Organizational Objectives

The Bowling Green State University American Society for Quality (ASQ) student branch developed objectives of the overall organizational related activities. The global objectives established by the American Society for Quality (ASQ) organization are applied to the BGSU ASQ student branch. The goals established by the global ASQ organization are as follows:

1. Provide the ASQ members the necessary tools to utilize in today's organization. The tools defined are developed by global quality professionals and are shared among the members to ensure to evolving tools are utilized for quality improvement processes and procedures.
2. Training of the tools and other quality improvement apparatuses are communicated through the development of the global ASQ leaders.
3. Collaboration with a network of "World Partners" in twenty countries through a network of twenty-two certified license providers to provide the necessary training and certifications of quality members.

The ASQ organization seeks to provide potential members the ability to improve their quality skills and apply these skills to today's ever-changing organizations. The mission statement is as

follows: “To increase the use and impact of quality in response to the diverse needs of the world” (American Society for Quality, n.d.).

Student Organizations at BGSU

There are defined requirements outlined by the university that all student organizations at BGSU must meet. The student organization must meet the following criteria in order to be considered a student organization at the university:

1. The structure of leadership members must be defined
2. A BGSU faculty member must be identified to facilitate the organization’s activities
3. A government protocol must be developed to define the organizations’ critical information and must be maintained accordingly

Past Research Associated with the ASQ Student Branch

Previous research has been conducted within the BGSU ASQ student branch to improve other areas of deficiencies. A research study was developed and conducted in the area of web-based systems development. In addition to the research in the area of web-based systems, other areas have also been reviewed, including the increase of networking between quality organizations and professionals and also streamlining the membership processes of prospective students.

Improvement of BGSU ASQ Web-based Systems

The Quality Systems (QS) courses are offered through online courses. Students completing these courses are from different areas of the world and are unable to be in the “traditional” class settings. Therefore, the project of the web-based improvement systems was completed to aid in the process of including the online-based students in the BGSU ASQ student branch.

Dr. John Sinn and Mr. Armen Ilikchyan stated the objectives associated with this improvement project. The objectives included the following components:

1. Create a web-based system to provide current and prospective students the opportunity to obtain ASQ organization, and other, related information.
2. Ensure material is maintained accurately and new and revised information is revised accordingly.
3. Include related collaboration tools on the web-based systems.

The completion of this research project identified a streamlined system that would allow current BGSU ASQ student branch members, and also prospective members, the ability to access organizational information in a more efficient method.

Development of Streamlined Membership Processes

The membership process associated with the BGSU ASQ student branch included complex systems that did not allow for a streamlined user system. Dr. John Sinn and Mr. Armen Ilikchyan identified the processes associated with registering as a BGSU ASQ student branch member:

1. Student downloads or obtains the application form from branch advisor or branch leadership.
2. Student prints the form if downloaded.
3. Student fills out membership form.
4. Student or branch leadership scans and digitizes the paper application.
5. Student or branch leadership emails the digitized application to the branch advisor.
6. Advisor signs the Toledo Section check request form (to cover the first year membership fee

7. Advisor emails the check request form, along with the digitized application, to the ASQ Toledo Section treasurer.
8. Treasurer writes the check, and sends it and the application to ASQ headquarters.
9. Three to four weeks later, the student receives a membership card indicating successful registration.

Dr. Sinn and Mr. Armen Ilikchyan identified the aforementioned process components as over complex and recommended a more streamlined approach. The following process was suggested:

1. Navigating to the ASQ homepage.
2. Completing the electronic application for student member.
3. Paying the membership fee.

The new system would allow prospective members the ability to register using minimal steps. This would increase the capability of registration ultimately increasing the opportunities for new members (Ilikchyan & Sinn, 2012).

Improvement of Networking Systems between Quality Professionals and Organizations

Students are continuously seeking the advice from quality professionals involved in today's industries. There is great value associated with the information provided by quality professionals. The BGSU ASQ student organization seeks to create a networking system between these individuals and ASQ student members.

Dr. Sinn and Mr. Armen Ilikchyan discussed the development and improvement within the following areas: creating an online communication system that would allow BGSU ASQ student members the ability to work with quality professionals, create a committee of quality professionals that would assist students in class, and other, projects, and create student presentations to include at regional and national ASQ meetings (Ilikchyan & Sinn, 2012).

Documentation Systems

In today's industry, documentation systems within an organization are becoming increasingly important. The documentation of systems associated with a process or service should be documented in a standardized fashion. The benefit of utilizing a streamlined documentation management system is to allow associated members the ability to complete the process with ease and complete accuracy. This may also be deployed within strategic improvement projects and increases the likelihood of success.

Areas of documentation systems are considered critical to an organization or related system. Organizations view documents as being critical and they are many times important during auditing events. Auditing has a large impact on the operation of your company. A failure of an audit may result in reduction of consumer confidence or even the shutting down of a company. "Documentation is the key to GMP compliance and ensures traceability of all development, manufacturing, and testing activities. Documentation provides the route for auditors to assess the overall quality of operations within a company and the final product" (J Young Pharm, 2015).

Performance can be improved through historical analysis of originating and also continuously improved processes.

However, should a company seek to improve performance quality by regulating the processes and procedures with instructions, standards and other documents (hereinafter QMS documents), the effort always pays off. If the company did not have such documentation, and processes have not been addressed adequately, the improvements will move the company from a disordered state to a more

structured system, enormously benefiting the company, its customers and associates (Šaulinskas, Paliulis, & Meidute-Kavaliauskiene, 2013, p. 58).

The structuring of the documentation system allows for a standardized and streamlined process and operation standards. Additionally, the structured systems allow for a streamlined performance indicator and applicable improvements.

Quality is a characteristic that is the commonly focused on by institutions to ensure competitiveness and overall customer satisfaction. The creation of documented management systems has a positive effect on the quality systems associated with an organization. An example of an evolving documentation systems can be seen within the medical world. It can be difficult to track the large amount of information that is associated with each patient. Additionally, the consequences of inaccurate medical documents are not only costly, but may also result in fatality. Therefore, the medical field has continuously developed new systems to document the information systemically and accurately. “Identifying and implementing optimal clinical standards help health care providers achieve outcomes that surpass benchmarks for most diseases. It results in better quality, proven treatments and comprehensive care that continually raise medical standards” (Arbuckle, 2013, p. 32). This example can be applied to many other industries and also provide great benefit.

Implementing Documentation Systems

The last section, Documentation Systems, discussed quality and documentation management systems from the perspective of creation. This section will discuss the methods associated with implementing these systems. The processes associated with implementing these documentation systems must be created in a manner that allows for a robust, systemic, and accurate system.

As mentioned in the previous section, the medical world requires an accurate system to ensure the accuracy of cost and also the safety of the patients. There is a large amount of paperwork associated with the costs of each patient for related medical visits and/or procedures. In addition to the cost of paperwork, there are also many associated documents related to the registration process. The study associated with the aforementioned components identified a paperless method that would allow the associated users the ability to search and identify documents through the use of an electronic documentation system. The use of this system would provide great benefit to impacted users.

A document management system would show the staff what paperwork (prescriptions, orders, referrals, authorizations, etc.) and insurance information was to be provided at the time of registration and it would take a picture of patients while they were sitting in front of admission clerks. This would eliminate the patient returning months later and denying that they had received the services that they were billed for.

Bowden had used a document management system at a previous hospital and was able to convince administrators that this technology was the best way to cut paper overload, streamline patient information, protect against disasters, shore up workflow processes and capture lost revenues. His initial goal was to convert every paper document to digital form, starting with patient accounting records. (On a mission to Eradicate a Paper, 2011, p. 16).

The implementation of these systems created benefits for patients and medical staff members. The documentation management system created an organized method for record

keeping. This system also improved searching related processes associated with patient medical tracking.

BGSU Definition of Quality Systems

Quality systems in engineering practices are applied to multiple engineering roles in today's corporations. The concepts of quality systems relate to the improvement systems associated with engineering project completion.

The following terms define the concepts of quality applications:

1. Quality Culture: cultural aspects such as total quality, change and organizational development
2. Quality Systems: modeling, developing and analyzing systems for improvement
3. Quality Leadership: synchronizing data, documentation, new product development, organizational re-engineering challenges (Sinn & Samuel, 2001).

The aforementioned quality concepts identify the areas that are applied to the concept of quality systems.

Historical Perspective

The application of quality documentation management systems have historically shown the improvements associated with these implementations. Since the development of the original data management system, the concepts of successfully documenting and maintaining systems have evolved. Today's industries seek to develop documentation management systems customized to meet specific requirements of their company. The design of these systems are based specifically on the processes and activities associated with the organization.

In today's organizations, documented systems are deployed to ensure the success of specific processes and process components. Documentation management systems can be useful

for historical applications to current state situations. When information is stored adequately, it can be utilized for knowledge sharing and also benchmarking. If information is not tracked and documented accordingly, it is likely for the application of historical practices to be unsuccessful (Rubin, 2011, p. 119).

The documentation processes have also been created to aid in the area of traceability. Many organizations are held to federal standards that require specific documents to be maintained for a specific amount of time, depending on the purpose or functionality of the document. Traceability can be defined as “an ability to describe and follow the life of a requirement, in both a forward and backward direction, i.e., from its origin, through its development and specification, to its subsequent deployment and use” (Duraismy, 2013, p. 154). An organized documentation management system must be in place to ensure regulatory compliance.

Application of Engineering Concepts

Documentation procedures incorporate different areas of engineering concepts to ensure the effectiveness of these systems. Industrial and quality engineering philosophies are applied to the development of these systems in the areas of functionality and deployment. These philosophies are applied during the design and implementation phases to ensure the successful creation of the documentation management systems and related processes.

Industrial engineering can be defined as “Industrial engineers find ways to eliminate wastefulness in production processes. They devise efficient ways to use workers, machines, materials, information, and energy to make a product or provide a service.” (Bureau of Labor Statistics, U.S. Department of Labor, 2015). The aforementioned concepts are directly related to the components of the developmental systems of the necessary documents. The information

provided in the definition identifies the process of completing this type of system. The system is first developed through the creation of the documents, followed by the implementation phases, and finally the improvements are made as necessary.

Quality Engineering is defined as follows: “Discipline that deals with the analysis of a manufacturing system at all stages, to improve the quality of the production process and of its output” (Business Dictionary, 2014). Quality engineering concepts can be integrated with the development and implementation of the documentation management systems in the areas of development, functionality, and deployment. The definition should be understood from a high level perspective. It should not be applicable to manufacturing processes only. Quality engineering applications differ from industrial engineering applications in the area of maintaining. Industrial engineering concepts are used vastly in the development and testing stages, while quality engineering models can be utilized more in the maintaining stages. However, both quality and industrial engineering disciplines can be applied to multiple areas interchangeably.

These applications contribute to the success of the project. Efficiency and maintainability are characteristics that must be present in the development and deployment stages. Industrial and quality engineering methodologies incorporate a great amount of content, tools, and philosophies that are related to the development and maintaining of the documentation management systems.

Project Management Methodologies

The primary project management tool that will be utilized throughout the completion of the project includes the Define Measure Analyze Improve Control (DMAIC) approach. This quality tool is used widely by multiple industries and has indicated success. In addition to utilizing the DMAIC methodologies for project management quality tools, the Ongoing Process

Control Plans (OPCP) Standard Operating Procedures (SOP), Supplier Input Process Output Customers (SIPOC), and Key Performance Indicators (KPI) will also be used.

The define phase identifies the understanding of what the actual situation is. Thorough analysis is completed to fully understand what the problem actually is. In this phase, the problem statement is defined. Quantitative information is obtained and analyzed to accurately define what the current situation is and the problem that is involved with the situation.

The measure phase is utilized to outline the analysis tools and successfully collect the required information. “Measure is a function of the current state, existing status of performance. We measure cost (or other data) of existing process activities by gathering data at each process stage” (Sinn, 2006, st. 1.5). The information is collected and compiled into a working document that allows members to review the collected information.

The analyze phase is utilized to review the collected information obtained in the measurement phase. During the analysis phase, one should review the current state to understand the problem areas and associated trends. Statistical calculations and graphing may be completed to identify the current status and identify outliers that may indicate concerns.

The improvement phases should reflect what was identified in the analysis phase. The improvements must correlate with the conclusions found within the statistically calculated data. “Improve derives as results in analysis, coupled with information from ROL, indicating how best to reach the target, and recommendations to improve are based on this” (Sinn, 2006, st. 1.5).

The control phases are viewed as being continuous. The defined improvements are implemented within the improvement phases. The control phase integrates the monitoring of the improvement processes on a defined periodic schedule to ensure the improvements are still

applicable. Modifications of the processes may be necessary as the process continues to evolve. The monitoring of these systems should be documented for historical purposes.

The Ongoing Process Control Plan (OPCP) tool includes defining specific process components and their functions in relation to the entire process from a high level perspective. The OPCP functions can be described in the following definition and descriptions:

The OPCP is designed to document key methods, techniques and other general information used in the processing applications for the product under discussion. This includes process name, tools for production, process parameters, product characteristics, and possibly other specific process oriented information particular to this product, the emphasis being placed on better understanding the processes involved in producing the product. Secondly, the OPCP is designed to identify and document key customer information and expectations in the form of specifications, evaluation method, sample and inspection, analysis and reaction methods, and perhaps other information vital to controlling and improving the processes involved (Sinn, 2006, st. 1.5).

The OPCP is generally utilized to ensure the key methods that are associated with a process are identified. For documentation management systems project, the OPCP will be applied specifically in the area of understanding each sub-processes associated with the BGSU ASQ student branch and documentation of sub processes accordingly. The SOP can be applied in the same manner. However, its' function differs from that of the OPCP's. The SOP is utilized to define specific process components in a procedural, step-by-step manner, while the OPCP defines the process systems and sub-systems from a high level perspective.

The Supplier Input Process Output Customers (SIPOC) quality tool is commonly used to outline what components are associated with the process or system. Many times, this tool can be used to understand that the inputs are, what associated processes are involved, what the outputs are, and defining who the end customers are. This layout supports the analysis of understanding the whole system. The BGSU ASQ student branch SIPOC can be seen in Figure 1: BGSU ASQ Student Branch SIPOC.

Figure 1: BGSU ASQ Student Branch SIPOC



The Key Performance Indicators (KPI) are used to measure a system against predefined criteria to indicate whether a process is in or out of control. These characteristics are defined based on what the quality tolerances and targets are. In manufacturing, the KPIs may be complying with a torque value of 20 +/- 5. This means the sample data must be within 15 and 25 to be considered in control. All other values outside of 15-25 are considered out of control. The BGSU ASQ student branch documentation management system KPIs can be seen in Figure 2: BGSU ASQ Student Branch Documentation KPIs.

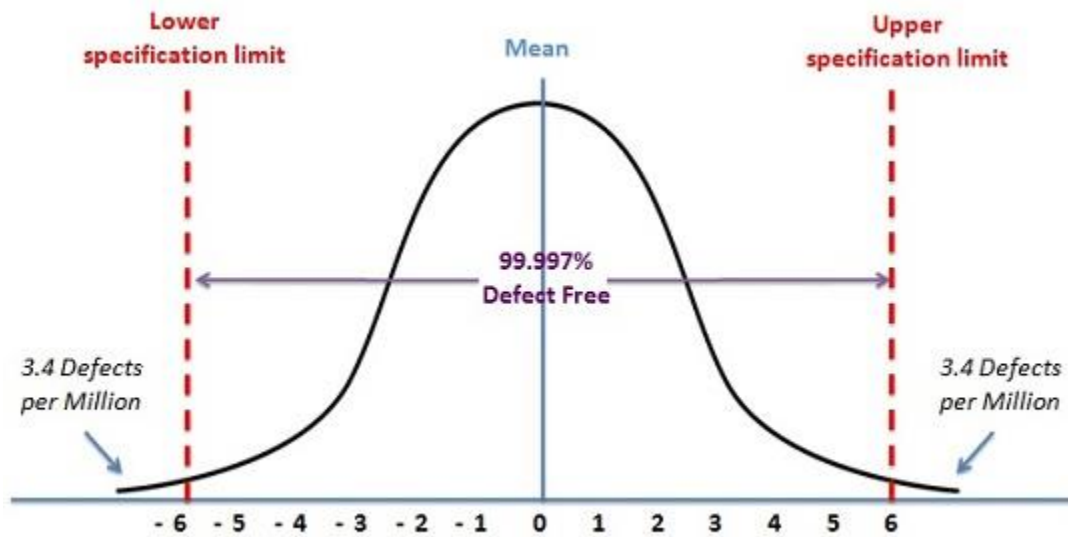
Figure 2: BGSU ASQ Student Branch Documentation KPIs

Key Performance Indicators (KPI)			
#	Parameter	Measure	Target Value
1	Definition of the Bowling Green State University American Society for Quality (ASQ) leadership roles and responsibilities.	Survey / Questionnaire	PASS, <70% OK REVIEW
2	Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) systems and related activities.	Survey / Questionnaire	PASS, <70% OK REVIEW
3	Build BGSU ASQ membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.	Survey / Questionnaire	PASS, <70% OK REVIEW
4	Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) documented procedures.	Survey / Questionnaire	PASS, <70% OK REVIEW
5	Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.	Survey / Questionnaire	PASS, <70% OK REVIEW

Lean Six Sigma Philosophies

Lean six sigma applications are used widely in today's management systems and methodologies. Lean Six Sigma can be defined as “a managerial approach that combines Six Sigma methods and tools and the lean manufacturing/lean enterprise philosophy, striving to eliminate waste of physical resources, time, effort and talent, while assuring quality in production and organizational processes” (Lean Six Sigma, 2015). Six Sigma specifically outlines the application of utilizing six total standard deviations from the mean. This can be more clearly seen in Figure 3: Six Sigma Layout. The image is from the website MindEdge Learning Workshop and effectively outlines the layout of the Six Sigma philosophy from a statistical normal curve standpoint (MLW Editor, 2015).

Figure 3: Six Sigma Layout



Lean practices include the elimination of waste associated with a system or sub-system. This includes completing a thorough analysis of a process or sub-process and identifying what specifically is producing waste. A thorough analysis may also be completed to identify areas that are not considered value. These areas would be considered as not contributing value to the end quality of the product.

Toyota Motor Company's high productivity and quality performance is routinely attributed to practices associated with Lean production. Similarly, firms implementing Six Sigma have reported significant financial gains from their deployment efforts. For example, in 1999 General Electric (GE) reported \$2 billion of net income benefits from Six Sigma initiatives (Shah, 2008, p. 6679).

Lean Six Sigma seeks to utilize quality methodologies to create a more efficient process. As previously mentioned, both Lean and Six Sigma have particular functions. The combination of these philosophies provide a great recipe for success.

Lean and six sigma philosophies have been developing since 1911.

Both Lean production and Six Sigma are broadly classified under the umbrella of process improvement programmes, which also include other approaches such as business process re-engineering, theory of constraints and total productive maintenance. The concepts behind Lean and Six Sigma are based on foundational ideas that date back to Taylor (1911), and incorporate the seminal works of Ohno (1978), Shingo (1981), and Deming (1986). Lean and Six Sigma are the most recent manifestations of the process improvement evolution programmes (Shah, 2008, p. 6680).

The aforementioned statement reiterates the discussion of the evolution of Lean six sigma philosophies. Continuously, the methodology is applied to varying organizations in different manners, customized to their specific processes. There is a great amount of development of Lean and Six Sigma philosophies. Industries are continuously adapting to changes in the areas of technology, changing regulatory requirements from a local and national level, and the changing of quality systems standards.

Lean Six Sigma philosophies are to be applied to the development of the document BGSU ASQ student branch. The documents that are to be created will provide a streamlined method that will allow members the ability to obtain consensus of the branch's quality standards. The application of these philosophies will aid in the accurate development and implementation of the documentation management systems.

Application of Quality Systems for Document Development

The aforementioned quality systematic tools described in previous sections will be applied throughout the project to ensure the most streamlined and efficient processes. The engineering and Lean Six Sigma concepts described previously will be applied to the

developmental and deployment phases to ensure a successful outcome. The purpose of applying these concepts specifically is to ensure the most streamlined and efficient manner of creating, deploying, and maintaining the upcoming documentation management system.

Quality system tools from a regulation standpoint include documents like Standard Operating Procedures (SOPs) and Working Instructions (WIs). These formal documents are utilized to specifically outline the processes or sub processes associated with an operation. These documents also outline critical limits and control areas that are considered critical to the process. This could include areas that if a failure were to occur, it would result in a quality defect. These areas are also considered when developing the documents specifically for the BGSU ASQ student branch documents and management system.

These systems will be created to meet the specific needs of the project. The DMAIC tools will be applied through all phases to ensure deficiencies are identified and improvements are made and implemented appropriately. DMAIC encompasses many quality models and tools that will be applied throughout the defining, research, and analysis related stages. As the research continues, quality tools and concepts will be applied.

Chapter II Summary

Chapter II: Review of Literature defined the related project objectives and strategies for completion of each objective. The local and global standpoints of the American Society for Quality were also described from a current and global perspective. Past research within Bowling Green State University was defined to identify other related concepts and research conducted in the past. The concepts of developing documentation systems were defined to develop relationship between definition and proposed research. This was also described from a deployment standpoint.

CHAPTER III: RESEARCH METHODOLOGIES

Overview

Chapter III: Research Methodologies seeks to specifically identify the problem statement and also layout the project objectives. All project objectives have a corresponding detailed strategy to accomplish each outlined task. This chapter will also describe the research and analysis strategy that will be used to accomplish each objective. Surveys are to be sent to several individuals involved with either the ASQ student branch or within the graduate and/or undergraduate Quality Systems program.

Restatement of Problem Statement

The problem is restated as follows: The problem for this study is to assess current management and documentation systems for the Bowling Green State University American Society for Quality (ASQ) student branch. The project would address these inadequacies and define what improvement steps may be applied to ensure the success of the student branch. The creation of the documentation management system would ultimately improve the student organization and provide student members, leaders of the student branch, faculty support, and the organization's Advisor readily available information to use for reference when completing branch related activities.

Project Objectives

The project objectives have been established to ensure the creation of the documented systems create a robust process to successfully document and define the BGSU ASQ student branch practices and procedures. The development of the project objectives was based on the associated goals of the project. This research project aimed to provide the BGSU ASQ student branch a collection of documents that would be readily available for reference for leadership,

support, faculty, and advising members. The completion of each objective would ultimately contribute to the overall goal of the research project.

The objectives are defined as follows:

1. Definition of the Bowling Green State University American Society for Quality (ASQ) student branch leadership roles and responsibilities.
2. Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) student branch systems and related activities.
3. Build BGSU ASQ student branch membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.
4. Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) student branch documented procedures.
5. Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.

The project objectives are to be completed in accordance to the strategic concepts established throughout the research project planning and completion phases. Table 1: Project Objectives and Strategy for Completion outlines each objective and corresponding strategy to complete that specific objective.

Table 1: Project Objectives and Strategy for Completion

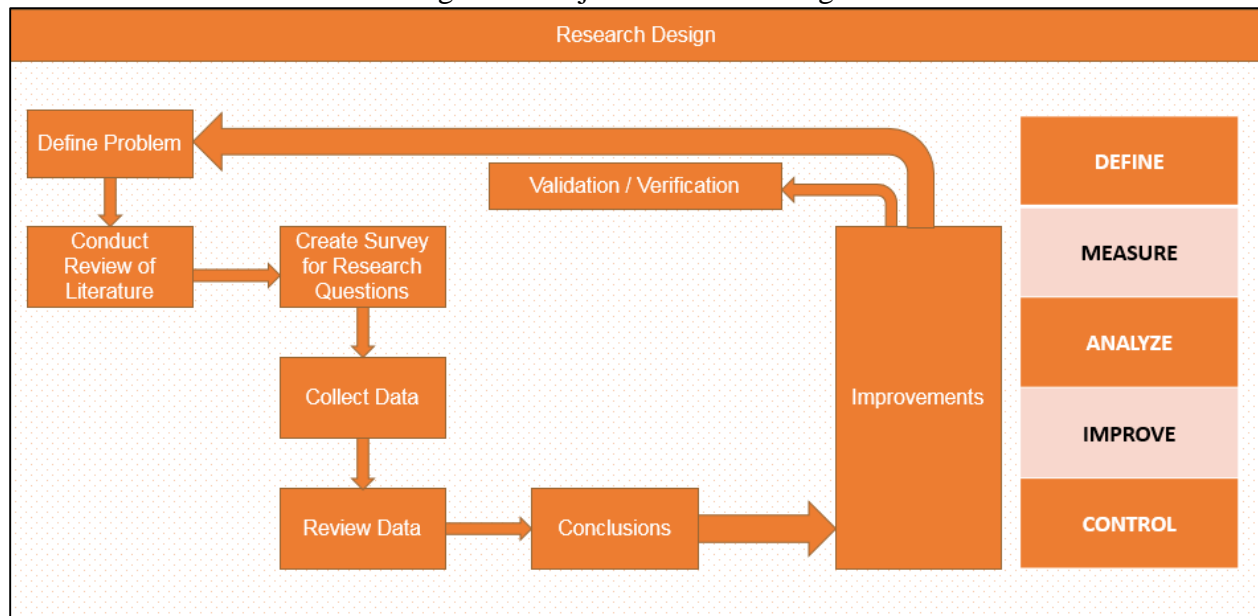
No.	Project Objective	Strategy for Completion
1.	Definition of the Bowling Green State University American Society for Quality (ASQ) student branch leadership roles and responsibilities.	Discuss with ASQ leadership members and faculty lead(s) to identify and document leadership members and responsibilities.
2.	Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) student branch systems and related activities.	Compose documentation templates and share with ASQ leadership members and faculty lead(s).

3.	Build BGSU ASQ student branch membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.	Provide ASQ student members and prospective members documents indicating the activities goals and related functions to build higher interest and increase knowledge of the organization; Apply this information on web-based systems
4.	Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) student branch documented procedures.	Include the finalized documents in a location that is accessible by all impacted members. Apply the information on web-based systems.
5.	Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.	Create a document that identifies the review of the documents in terms of timing and reviewing parameters.

Research and Analysis Strategy

The project will be completed through the use of university research and the completion of applicable quality DMAIC and other related tools. The data to be collected will be applied to the BGSU ASQ student organizational systems to ensure the implementation of the documentation systems transitions smoothly. The research design can be seen in Figure 4: Project Research Design. The research design is intended to provide a visual image of how the project is to be completed from a research standpoint. The data collected would provide a better understanding of the effectiveness and/or formatting of the newly created documents. The research strategy was developed to provide a guideline for continuous improvement(s) associated with this particular research project. This same strategy may be applied to future student branch improvement activities.

Figure 4: Project Research Design



Each defined objective has a corresponding strategy for completion. Table 2: Project Objectives and Procedure for Completion identifies the specific steps associated with the completion of each objective. The completion of this project seeks to create a documentation management system. The strategy outlined contributes to the increase likelihood of success for the student branch. Each step is to be completed to its fullest capability to ensure the creation of the robust management system.

Table 2: Project Objectives and Procedure for Completion

No.	Project Objective	Strategy for Completion
1.	Definition of the Bowling Green State University American Society for Quality (ASQ) leadership roles and responsibilities.	Discuss with ASQ leadership members and faculty lead(s) to identify and document leadership members and responsibilities.
<u>Step 1:</u> Hold meeting with BGSU ASQ student branch leadership member(s).		
<u>Step 2:</u> Provide information prior to meeting to ensure time can be used valuably.		
<u>Step 3:</u> Share draft document and obtain feedback.		
<u>Step 4:</u> Make changes as necessary and publish.		
2.	Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) systems and related activities.	Compose documentation templates and share with ASQ leadership members and faculty lead(s).
<u>Step 1:</u> Hold meeting with BGSU ASQ student lead member(s).		
<u>Step 2:</u> Share information prior to meeting to ensure valuable use of time.		
<u>Step 3:</u> Outline related branch activities.		
<u>Step 4:</u> Draft documents and share with team		
<u>Step 5:</u> Make updates based on feedback and publish when finalized.		
3.	Build BGSU ASQ membership as a strengthened organization through increased awareness of what is involved in managing the branch, and complexities of the organization and to ensure the procedures are valid.	Provide ASQ student members and prospective members' documents indicating the activities goals and related functions to build higher interest and increase knowledge of the organization; Apply this information on web-based systems.
<u>Step 1:</u> Create a periodic timeframe to hold meetings – i.e. monthly, quarterly, etc.		
<u>Step 2:</u> Create a standardized agenda and share with lead member(s).		
<u>Step 3:</u> Outline the goals and all branch activities		
<u>Step 4:</u> Create documents accordingly to outline all associated activities.		
<u>Step 5:</u> Conduct surveys to ensure the validity of the documents		
4.	Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) documented procedures.	Include the finalized documents in a location that is accessible by all impacted members. Apply the information on web-based systems.
<u>Step 1:</u> Identify the optimal location to incorporate these documents.		
<u>Step 2:</u> Upload finalized documents.		
<u>Step 3:</u> Send surveys to ensure ease of access to documents.		
5.	Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.	Create a document that identifies the review of the documents in terms of timing and reviewing parameters.
<u>Step 1:</u> Draft a maintaining system.		
<u>Step 2:</u> Share with BGSU ASQ student lead member(s).		

<u>Step 3: Make adjustments based on feedback</u>
<u>Step 4: Finalize and publish maintenance system</u>

Development of Procedural Documentation Templates

The templates are created to provide an overview of the concepts related to the documentation of systems. The templates are to be used to ensure consistent formatting across all of the official documents. The use of the template also ensures critical information is captured for all documents regulating functions of the student branch. The templates that are to be used identify the following components:

1. Document Title: an overview of the purpose of the document
2. Date of Creation: the date the document was created
3. Author: who originated the document
4. Revision Number: increments by one number after each update
5. Background: an overview of the document – i.e. the purpose, why it is being created, etc.

Approximately three to five sentences.

6. Purpose: one sentence directly stating why the document is being created.
7. Definition of Terms and/or Abbreviations: defines all abbreviations and their corresponding meanings.
8. Structure and Functions: lists each step and/or requirement associated with the operation.
9. Tracking Updates: lists each revision, identification of change (short description), initials of who changes, and corresponding date.

Documentation templates utilize multiple areas, similar to what is listed above. The formatting of these particular documents that are to be created with this project incorporate several notable areas that define critical areas of the documents. Documents

require a title, date of creation, and author to ensure the reader understands the purpose, timing, and department that developed this document. It is important to consider what you intend the reader to understand when outlining an official document template.

Outlining areas to complete when creating a new document ensures the author considers pertinent areas that must be included for the intended audience.

Data Collection Methodologies and Analysis

The project seeks to create a documentation management system for the BGSU ASQ student branch. In order to ensure the effectiveness of the newly created documents, subjects could complete a survey that would indicate the accuracy, formatting and understanding of the documents. The survey would be sent via email to subjects within the ASQ student branch, ASQ student branch leadership members and ASQ student branch Advisor, ASQ student branch support members, undergraduate Quality Systems students, and graduate Quality Systems students.

The survey included questions that seek to understand the accuracy and formatting of the documents. The responses would be indicated as either “Yes” or “No” or a rating between one and ten. There are weights associated with each question that would aid in the calculation of the response score and identify the question and/or response as being significant. Table 3: Survey Questions and Response Weights outline how the responses are to be analyzed. The “Yes” or “No” responses would be calculated as “1” for a value of “Yes” and “0” for a value of “No”. This would allow the scoring system to properly calculate the findings. The ratings “1” through “10” would also be used along with the weight of the response for calculation. The data would then be

statistically calculated to understand the effectiveness of the documents and location of the documents.

Table 3: Survey Questions and Response Weights

#	Objective	Weight	Survey Question(s)
1	Definition of the Bowling Green State University American Society for Quality (ASQ) leadership roles and responsibilities.	5	Does the content align with what you believe is accurate? - Y/N
		4	Is the information easy to understand? - Y/N
		3	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?
		4	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in accuracy?
2	Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) systems and related activities.	5	Does the content align with what you believe is accurate? - Y/N
		5	Is the information easy to understand? - Y/N
		3	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?
		4	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in accuracy?
3	Build BGSU ASQ membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.	5	Does the documents give you an understanding of what is involved with the student organization? - Y/N
		5	Would you feel comfortable being in a leadership role within the student organization based on the listed roles and responsibilities document? - Y/N
		4	Does the documents align with the actual functions of the student organization? - Y/N
4	Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) documented procedures.	5	Are the documents easy to access? - Y/N
		5	If you were to rate to retrieval process from (1-10) with 1 being poor and 10 being excellent, how would you rate the retrieval process?
5	Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.	4	If you were to rate to the maintaining document from (1-10) with 1 being poor and 10 being excellent, how would you rate the maintaining document?

The responses will be statistically calculated as previously mentioned. The Key Performance Indicator (KPI) discussed in the last chapter identified the targeted goals of the calculated data. For this particular study, the targeted goal is achieving 70% of the values being the desired response. The desired responses can be seen in Table 4: Desired Responses for Each Question. The table clearly outlines the targets for response being either “Yes” for a Yes/No Question or at least “7” for questions requesting a rating on a scale of one to ten. In this case, one indicates very poor and ten indicates excellent.

Table 4: Desired Responses for Each Question

Objective	Weight	Survey Question(s)	Desired Response
Definition of the Bowling Green State University American Society for Quality (ASQ) leadership roles and responsibilities.	5	Does the content align with what you believe is accurate? - Y/N	Yes
	4	Is the information easy to understand? - Y/N	Yes
	3	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?	>7
	4	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in accuracy?	>7
Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) systems and related activities.	5	Does the content align with what you believe is accurate? - Y/N	Yes
	5	Is the information easy to understand? - Y/N	Yes
	3	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?	>7
	4	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in accuracy?	>7
Build BGSU ASQ membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.	5	Does the documents give you an understanding of what is involved with the student organization? - Y/N	Yes
	5	Would you feel comfortable being in a leadership role within the student organization based on the listed roles and responsibilities document? - Y/N	Yes
	4	Does the documents align with the actual functions of the student organization? - Y/N	Yes
Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) documented procedures.	5	Are the documents easy to access? - Y/N	Yes
	5	If you were to rate to retrieval process from (1-10) with 1 being poor and 10 being excellent, how would you rate the retrieval process?	>7
Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.	4	If you were to rate to the maintaining document from (1-10) with 1 being poor and 10 being excellent, how would you rate the maintaining document?	>7

Project Timeline

The BGSU ASQ Student Organization Documentation Management Development Project includes a strategic timeline. This timeline allocates the accurate amount of time required to complete each specific phase. The table below describes the project phases and the timeline to complete each phase. The timeline may be subject to change as a result of the summer timing. Any deviation from the timeline will not be detrimental to the completion of the defined objectives. The project timeline generally outlines the tasks and associated month and year for completion.

Table 5: Project Tasks and Timeline

No.	Task	Timing
1	Define BGSU ASQ leadership structure and related roles.	January 2015
2	Define the BGSU ASQ student activities.	May 2015
3	Define the university requirements for the BGSU ASQ student organization.	May 2015
4	Develop documentation templates and share with impacted members.	May 2015
5	Develop document to track the revision of documents.	June 2015
6	Finalize drafted documents.	June 2015
7	Upload finalized documents to location that allows accessibility.	June 2015

Chapter III Summary

Chapter III outlined the research methodologies associated with the research project. The research strategy outlined what and how the research is to take place. The information provided within Chapter III identified the related surveys and planned statistical analysis for all responses. Chapter III also outlined the project objectives and strategy to complete each objective.

Chapter III provided pertinent information related to the logic regarding the research associated with this project. There are several areas that are to be considered when developing the documentation management system. Chapter III outlined these areas of consideration.

CHAPTER IV: FINDINGS

Overview

The surveys were sent and data was collected based on the responses on the surveys. The data was statistically calculated to determine the accuracy and effectiveness of the newly created documentation management system. This chapter outlines the results and related findings involved with the responses of the surveys.

Response Rates

The surveys were sent to several individuals who were involved, and not involved, with the BGSU ASQ student branch. Some members were leaders within the student branch, some were faculty leaders and support members, and others were graduate and undergraduate Quality Systems majors at Bowling Green State University. Fifty-six surveys were sent via email. Of the fifty-six surveys sent, four were completed. Since the BGSU ASQ Student Branch consists of only ten to twelve members, the four respondents were considered suffice for the purpose of this research project.

The responses included within the returned surveys indicated the participant's rating of one through ten based on the accuracy, formatting, accessibility, or general understanding of the document. The survey also indicated "Yes" or "No" answers that also responded to the areas of accuracy, formatting, and/or general understanding. The participants also had the opportunity to elaborate on answers if they desired. The participants were within the graduate Quality Systems program, the undergraduate Quality Systems program, the BGSU ASQ student branch leadership members, and also faculty members. Table 6: Response Rates indicates the number of respondents in their correlating categories.

Table 6: Response Rates

CATEGORY	NUMBER OF RESPONDENTS
BGSU ASQ Student Branch Leaders And Faculty	2
BGSU ASQ QS Undergraduate and Graduate Students	2

Results

The results were all based on the findings obtained from the surveys. The information was collected and statistically analyzed to determine the effectiveness of the newly created documents. The responses from participants and the information obtained was taken into consideration. In addition to analyzing the quantitative information, the additional responses that were included for elaboration were also taken into consideration from an improvement standpoint. The main intention of the survey was to statistically analyze the data and provide a foundational status of the newly created documentation management system for the BGSU ASQ student branch. The effectiveness and accuracy of the documents were better understood as a result of the survey collection and assessment.

Survey

The responses obtained from the survey outlined several areas of the characteristics of the documentation management system. The responses were quantified to determine the statistical relevance and significance. The survey requested subjects to respond either a “Yes” or “No” or a one through ten to a question related to the format, flow of information, understanding and accuracy of the content provided on the document.

The responses indicated a distribution that encompassed several different answers. Each objective required specific questioning to determine the effectiveness, accuracy, or formatting of the newly created documents and management system. The questions were created to identify

pertinent areas of the outlined objectives. Table 7: Responses and Correlation to Objectives identified specific percentages related to the areas of the defined objectives. The table clearly outlines the percentages of respondents in correlation with each objective and also in comparison with the targeted goals.

Table 7: Responses and Correlation to Objectives

Objective	Desired %	Actual %
Objective 1: Definition of the Bowling Green State University American Society for Quality (ASQ) leadership roles and responsibilities.	70%	85%
Objective 2: Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) systems and related activities.	70%	76%
Objective 3: Build BGSU ASQ membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.	70%	71%
Objective 4: Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) documented procedures.	70%	38%
Objective 5: Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.	70%	75%

The data indicates that objectives one, two, three, and five met the desired 70% criteria. This information drives the improvements of the BGSU ASQ student branch documentation management systems. The information collected serves as an improvement tool that outlines the areas of concern. The 70% indicates the desired percentage of responses meeting the “Yes” or above “7” criteria. This number may be increased as the student branch continues to improve. The increase of the desired 70% of responses meeting the criteria would only drive the student branch

to be a more effective and functioning organization. This change would be completed only through the approval of the student leaders and the student branch's advisor. However, for the purpose of this particular research study, the desired 70% was a sufficient goal.

The values that were considered below the targeted responses were carefully analyzed. Since the survey was utilized as an improvement tool, all areas that were indicated as "poor" were taken into consideration. The responses that were below the desired threshold were reviewed to determine if changes were necessary.

The result of 38% for objective four was considered unexpected. This result was not anticipated during the planning phases of the project. The result does not indicate failure; however, the result identifies an area that requires change and/or improvements. Objective 4: Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) documented procedures did not meet the 70% predefined threshold. The retrieval process of the documents is critical. The statistical calculation of 38% indicates there is a problem within the system of retrieving the documents. The issue identified is the fact that a URL is not available specifically for the location of these documents. The OrgSync location the documents are held require BGSU sign in credentials and utilization of the search function. However, since the documents would be accessed by members of the ASQ student branch, they would be familiarized with this website and would have no issue accessing the information.

Based on the findings identified from the surveys, the documents are considered effective. However, there is room for improvement to make the system as effective and efficient as possible. The surveys indicated changes that would be considered an improvement and will be implemented moving forward. Specifically, recruitment activities as outlined within one of the documents included in objective two, may be altered to reflect actual procedures.

Findings as it Relates to the Objectives

The completion of the research study produced conclusions as it relates to the predefined objectives. The information obtained via surveys impacted the content within the official documents. After review with the president of the student branch, the documents were adjusted as requested and formalized. The documents were then uploaded to the designated, web-based location. Table 8: Outlined Findings for Each Objective describes the research project findings as it relates to the project objectives.

Table 8: Outlined Findings for Each Objective

No.	Project Objective	Steps	Findings
1	Definition of the Bowling Green State University American Society for Quality (ASQ) student branch leadership roles and responsibilities.	Reviewed the outlined document with the student branch president and also aligned information with the university requirements. A survey was sent to validate accuracy.	A document was created that outlined the leadership roles and responsibilities. The information is outlined on the document “001 Bowling Green State University American Society for Quality Student Leadership Structure”.
2	Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) student branch systems and related activities.	Reviewed the outlined document with the student branch president and made updates as requested. Sent survey to validate accuracy.	The recruitment activities are to formally occur annually; however, all branch related activities should be viewed as recruiting opportunities. The procedure is outlined in the created document “002 Bowling Green State University American Society for Quality Student Branch Recruitment Activities”.
3	Build BGSU ASQ student branch membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.	Reviewed the outlined document with the student branch president and also aligned information with the university requirements. Sent survey to validate accuracy.	The document “003 Bowling Green State University American Society for Quality Student Branch University Requirements for Student Organizations” was created and outlined what BGSU requires of the student branch. “004 Bowling Green State University American Society for Quality Student Branch Financial Processes” outlined the financial procedure that is specifically defined on the BGSU official website. “005 Bowling Green State University American Society for Quality Student Branch Requesting of Funds Processes” outlined the defined process to request student branch funds.
4	Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) student branch documented procedures.	Reviewed location with student branch president and lead member to ensure effectiveness. Sent survey to validate accuracy.	The location will be on the OrgSync BGSU ASQ website. The student members are familiar with this location and will have access to the documents within the “Files” section.
5	Development of a maintainability system to ensure the accuracy of	Reviewed the outlined document with the student	The document titled “Maintenance” was created and is to be used as a tool to track the

	updates as the student organization evolves through academic years.	branch president and also aligned information with the university requirements. Sent survey to validate accuracy.	existing documents and also identify new documents as necessary.
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Chapter IV Summary

The completion of the research portion of the research study outlined the findings as they relate to each objective. The collection of data quantified the effectiveness of each predefined objective. The percentages indicated all objectives, aside from objective four, met the predefined target percentage of 70%. However, objective four relates to the accessibility of the documents and the location chosen is suitable for the BGSU ASQ student branch members and leaders. The steps for completion each portion was also identified and the corresponding findings.

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

Overview

As mentioned in the previous chapters, documentation management systems are, in fact, critical and have a large impact on the operational success of a process or system. The creation of a documentation management system standardizes the processes, mitigating the risks of inconsistencies. The function of an operation is less likely to produce wastes or defects when the operation has a corresponding standard operating procedure and an effective document management system. The formal document, or standard operating procedure, specifically outlines the process and associated critical information. The information is very detailed and may be step-by-step if outlining a particular task.

The BGSU ASQ student branch also realizes the aforementioned benefits. The creation of the documentation management system for the BGSU ASQ student branch created a more standardized system. This allowed the BGSU ASQ student branch leaders, members, advisor, and support faculty members an opportunity to access formal information that outlined the specific functions of the student organization. The impacted individuals would be able to complete the branch's functions in a consistent fashion. This created a more streamlined and robust system, particularly for the upcoming students who may not be familiar with the student branch.

The student branch also now has the opportunity to further understand their operations. The documents outline pertinent information related to the functioning of the student branch. Individuals now have the ability to thoroughly assess the defined operations and make improvements as necessary. The formalizing of these documents not only standardized the system of the student branch, but it also provided a sustainable foundation that may be used for

continuous improvement activities. The documents provided a foundation of how the student branch actually functions. Student leaders and/or faculty support members may now use this information as a basis for future improvement projects.

Recommendations and Conclusions as it Relates to the Objectives

As mentioned in the previous chapter, the research project identified conclusions based on each project objective. The findings from the research study were carefully analyzed. The recommendations and conclusions were based on the survey results and noted improvements from the respondents.

Table 9: Recommendations and Conclusions as they Relate to Each Objective

No.	Project Objective	Recommendations	Conclusions
1	Definition of the Bowling Green State University American Society for Quality (ASQ) student branch leadership roles and responsibilities.	Continue investigating the roles and responsibilities of the student branch leaders. Updates may be made to reflect actual situation.	The leadership structure was more clearly defined. The ASQ student branch now has a better understanding of the roles of the leadership members and can use the documents as a reference for future purposes.
2	Development of procedural systems for all related Bowling Green State University American Society for Quality (ASQ) student branch systems and related activities.	Hold formal recruitment activities annually and ensure material is well-prepared prior to meeting. Continue investigating the process and make updates to the document as necessary.	The recruitment activities should be planned to be held annually. However, all public events related to the student branch should be viewed as “recruiting”.
3	Build BGSU ASQ student branch membership as a strengthened organization through increased awareness of what is involved in running the branch, and complexities of the organization and to ensure the procedures are valid.	The created documents should be referenced when making decisions procedurally. The documents should also be reviewed on a routine basis to ensure the validity.	The documents created for objective 3 outline specific procedures related to university branch requirements, financial procedures, requesting of funds branch constitution development, and advisor responsibilities. The specific procedures were found via the BGSU official website and the validity was tested through the research survey.
4	Development of a system that ensures accessibility of the Bowling Green State University American Society for Quality (ASQ) student branch documented procedures.	Maintain the BGSU ASQ OrgSync website to ensure all information is up to date.	The location was determined to be on the OrgSync website. This location is ideal because many students involved with the student branch are familiar with this website. The documents are housed in this location and should be updated and re-uploaded as necessary.
5	Development of a maintainability system to ensure the accuracy of updates as the student organization evolves through academic years.	Review the maintenance system and ensure information stays up to date.	The maintenance document is to be used as a tracking tool to ensure document information is tracked. The tool was considered effective as a result of the findings on the research survey sent.

Recommendations for Procurement

The creation of the documentation management system for the BGSU ASQ student branch was a great step in the direction of quality improvement. However, an effective procurement process must be in place to ensure the documents are being utilized to their highest capability. Overall, the official documents are intended to provide a streamlined system to individuals seeking to understand the function of the student branch. Since the documentation management systems are in place, it is important to identify how they are to be sustained through academic years.

Procurement requires effort from multiple areas to ensure the effectiveness of the system or program throughout the years. It is important to consider characteristics that may affect the procurement process. The following items outline the recommendations for accurately procuring the documentation management systems:

- Clearly define individual(s) responsible for maintaining the documents. Also clearly outline what the responsibility includes.
- Ensure the tracking method is effective. As documents are being revised, created, and deleted, etc., it is important to ensure the tracking system is in fact capturing this.
- Ensure communication with the ASQ Toledo section is being maintained. The BGSU ASQ student branch is directly affiliated with the ASQ Toledo section. It is important to ensure effective communication is maintained between the student branch and this section.

- Ensure the BGSU ASQ student branch meets at a minimum four times per one year. This may diminish as the student branch strengthens. This may also increase depending on the thoughts of the BGSU ASQ leadership members and/or advisor.

Recommendations for Future Studies

It is likely for future studies to be completed related to the BGSU ASQ student branch. The conclusions obtained from this particular research project could be applied to future research initiatives. There are several areas that should be considered when completing these types of studies. These areas may include the following:

- Understand the goals and/or official objectives of the BGSU ASQ student branch.
- Complete thorough assessment of quality engineering practices and apply this information to the research.
- Complete thorough assessment of Lean Six Sigma philosophies and apply this information to the research.
- Maintain active communication with the ASQ Toledo Section and the ASQ national level.
- Create a more standardized system for the student branch as academic years evolve.

Consider developing an auditing model to ensure the effectiveness of the student branch.

Chapter V Summary

The research findings, as outlined within Chapter IV, contributed to the conclusions and recommendations defined in this chapter. All five predefined objectives included corresponding recommendations and conclusions. Additionally, Chapter V also outlined the recommendations for procurement. These areas are particularly important because they ensure the documentation management system remains effective throughout evolving academic years. The

recommendations for future studies also outline pertinent areas that would benefit the future of the student branch greatly.

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APPENDIX A: HSRB APPROVAL NOT REQUIRED LETTER



DATE: May 19, 2015

TO: Sara Murphy

FROM: Bowling Green State University Human Subjects Review Board

PROJECT TITLE: [754960-1] ASSESSMENT OF MANAGEMENT AND DOCUMENTATION
SYSTEMS FOR THE BOWLING GREEN STATE UNIVERSITY AMERICAN
SOCIETY FOR QUALITY STUDENT BRANCH

SUBMISSION TYPE: New Project

ACTION: HSRB APPROVAL NOT NEEDED

DECISION DATE: May 19, 2015

Thank you for your submission of New Project materials for this project. The Bowling Green State University Human Subjects Review Board has determined this project does not meet the definition of human subject research under the purview of the HSRB according to federal regulations.

We encourage you to continue to confirm with the HSRB whether future projects of this nature require review.

We will retain a copy of this correspondence within our records.

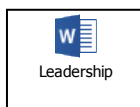
If you have any questions, please contact the Office of Research Compliance at 419-372-7716 or hsrb@bgsu.edu. Please include your project title and reference number in all correspondence regarding this project.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Human Subjects Review Board's records.

APENDIX B: SURVEY QUESTIONNAIRE FOR ASQ LEAD & FACULTY

Directions:

Open the embedded document(s). -->



**Double Click
the Icon**

Answer the survey questions by choosing an answer from the drop down box based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: **5/29/15**

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#1: BGSU ASQ Roles and Responsibilities	
Questions & Responses:	
1	Does the content align with what you believe is accurate? - Yes/No
Yes/No	
Additional Information	
2	Is the information easy to understand? - Yes/No
Yes/No	
Additional Information	
3	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?
1-10	
Additional Information	
4	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in accuracy?
1-10	
Additional Information	

Directions:

Open the embedded document(s). -->



Answer the survey questions by choosing an answer from the drop down box based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: **5/29/15**

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#2: BGSU ASQ Activities / Functions	
Questions & Responses:	
1	Does the content align with what you believe is accurate? - Y/N
Yes/No	
Additional Information	
2	Is the information easy to understand? - Y/N
Yes/No	
Additional Information	
3	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?
1-10	
Additional Information	
4	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in accuracy?
1-10	
Additional Information	

Directions:

Open the embedded document(s). -->



Double Click
the Icons

Answer the survey questions by choosing an answer from the drop down box based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: 5/29/15

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#3: Understand BGSU ASQ Functions / Activities	
Questions & Responses:	
1	Does the documents give you an understanding of what is involved with the student organization? - Y/N
Yes/No	
Additional Information	
2	Would you feel comfortable being in a leadership role within the student organization based on the listed roles and responsibilities document? - Y/N
Yes/No	
Additional Information	
3	Does the documents align with the actual functions of the student organization? - Y/N
Yes/No	
Additional Information	

Directions:

Open the following link (URL) -- > <https://orgsync.com/10148/files/785484>

Open Documents

Answer the survey questions by choosing an answer from the drop down box based on accessibility of the website.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: 5/29/15

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#4: Accessibility	
Questions & Responses:	
1	Are the documents easy to access? - Y/N
Yes/No	
Additional Information	
2	If you were to rate to retrieval process from (1-10) with 1 being poor and 10 being excellent, how would you rate the retrieval process?
Yes/No	
Additional Information	

Directions:

Open the embedded document(s). -->



**Double Click
the Icon**

Answer the survey questions by choosing an answer from the drop down box based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: **5/29/15**

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#5: Maintainability System	
Questions & Responses:	
1	If you were to rate to the maintaining document from (1-10) with 1 being poor and 10 being excellent, how would you rate the maintaining document?
1-10	
Additional Information	

APPENDIX C: SURVEY QUESTIONNAIRE FOR BGSU QS GRADUATE AND UNDERGRADUATE STUDENTS

Directions:

Open the embedded document(s). -->



**Double Click
the Icon**

Answer the survey questions by entering a value based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: **5/29/15**

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

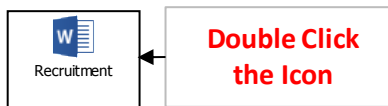
Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#1: BGSU ASQ Roles and Responsibilities	
Questions & Responses:	
1	Is the information easy to understand? - Yes/No
Yes/No	
Additional Information	
2	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?
1-10	
Additional Information	

Directions:

Open the embedded document(s). -->



Answer the survey questions by choosing an answer by entering a value based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: **5/29/15**

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#2: BGSU ASQ Activities / Functions	
Questions & Responses:	
1	Is the information easy to understand? - Y/N
Yes/No	
Additional Information	
2	If you were to rate the document from (1-10) with 1 being poor and 10 being excellent, how would you rate this document in formatting?
1-10	
Additional Information	

Directions:

Open the embedded document(s). -->



**Double Click
the Icons**

Answer the survey questions by entering a value based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: 5/29/15

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#3: Understand BGSU ASQ Functions / Activities	
Questions & Responses:	
1	Does the documents give you an understanding of what is involved with the student organization? - Y/N
Yes/No	
Additional Information	
2	Would you feel comfortable being in a leadership role within the student organization based on the listed roles and responsibilities document? - Y/N
Yes/No	
Additional Information	

Directions:

Open the following link (URL) -- > <https://orgsync.com/10148/files/785484>
 Open Documents

Answer the survey questions by entering a value in the cells based on accessibility of the website.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: 5/29/15

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#4: Accessibility	
Questions & Responses:	
1	Are the documents easy to access? - Y/N
Yes/No	
Additional Information	
2	If you were to rate to retrieval process from (1-10) with 1 being poor and 10 being excellent, how would you rate the retrieval process?
Yes/No	
Additional Information	

Directions:

Open the embedded document(s). -->



**Double Click
the Icon**

Answer the survey questions by entering a value based on the review of these documents.

Author: Sara K. Murphy

Date Sent: 5/20/15

Date to Return: **5/29/15**

Purpose: To gain consensus on effectiveness of system and/or operation.

Answer all questions to best of ability, focusing on answer

Guidelines: accuracy.

Please provide answers in the RESPONSE area indicated in yellow. The background with adjust to NO FILL when completed.

Objective#5: Maintainability System	
Questions & Responses:	
1	If you were to rate to the maintaining document from (1-10) with 1 being poor and 10 being excellent, how would you rate the maintaining document?
1-10	
Additional Information	

APPENDIX D: DOCUMENTATION TEMPLATE



BOWLING GREEN STATE UNIVERSITY

American Society for Quality (ASQ) Student Organization

April 21, 2015

General Information	
Document Title	
Doc. No.	
Date of Creation	
Author	
Revision Level	
Overview	
Background	
Purpose	
Definition of Terms and/or Abbreviations	
Structure and Functions	
1.	1. 1.1 1.2
2.	2. 2.1 2.2
3.	3. 3.1 3.2
Revisions	

APPENDIX E: FORMAL BGSU ASQ STUDENT BRANCH DOCUMENTATION



BOWLING GREEN STATE UNIVERSITY
American Society for Quality (ASQ) Student Organization

April 14, 2015

General Information	
Document Title	Bowling Green State University American Society for Quality Student Leadership Structure
Doc. No.	001
Date of Creation	April 14, 2015
Author	Sara K. Murphy
Revision Level	001 - Creation
Overview	
Background	The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies. The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.
Purpose	The purpose of the development and defining of the Bowling Green State University American Society for Quality Student Leadership Structure is to outline the organization's leadership member's roles and responsibilities.
Definition of Terms and/or Abbreviations	ASQ: American Society for Quality BGSU: Bowling Green State University
Structure and Functions	
1.	<p>1. President</p> <p>1.1 Provides the organization guidance and leadership as necessary.</p> <p>1.2 Makes decisions on behalf of the student organization, upon approval of faculty lead and/or advisor.</p> <p>1.3 Facilitates meetings as necessary.</p> <p>1.4 Maintaining of lists including members contact information and student ID numbers.</p> <p>1.5 Submit annual student organizational activities to ensure renewal.</p> <p>1.5.1 President and treasurer of the organization should pass annual trainings to demonstrate the status of the organization and be familiar with all updates about student organizations at BGSU (may be completed by Vice President, if necessary).</p>

2.	2. Vice President 2.1 Assist the President as necessary with multiple tasks. 2.2 Complete Presidential functions in the event the President is absent. 2.3 Scheduling of meetings and locations (if desired).
3.	3. Treasurer 3.1 Preparation of annual student organization budget, incorporating all activities that are planned for the academic year. 3.2 Collection of funds and paying of organizational related bills. 3.3 Keeping record of all transaction records. 3.4 Submitting of budgetary reports.
4.	4. Secretary 4.1 Documenting meetings including pertinent discussion areas. 4.2 Working with student organization leadership members and assisting as necessary.
Revisions	
001	Creation - SKM



BOWLING GREEN STATE UNIVERSITY
American Society for Quality (ASQ) Student Organization

May 8, 2015

General Information	
Document Title	Bowling Green State University American Society for Quality Student Branch Recruitment Activities
Doc. No.	002
Date of Creation	May 8, 2015
Author	Sara K. Murphy
Revision Level	001 - Creation
Overview	
Background	The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies. The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.
Purpose	The purpose of the development of this document is to outline the function associated with the recruitment activities for the BGSU ASQ student branch.
Definition of Terms and/or Abbreviations	ASQ: American Society for Quality BGSU: Bowling Green State University
Structure and Functions	
1.	<p>1. Duration</p> <p>1.1 The recruitment activities are to be held annually in the Fall semester.</p> <p>1.1a Time of recruitment is subject to change, but must be held at least one time per academic year.</p> <p><i>*Note: All public activities of the student branch should be viewed as a recruitment activity.</i></p>
2.	<p>2. Activities</p> <p>2.1 Allocate funding for the event (i.e. food, drinks, etc.). This is to be completed by the treasurer.</p> <p>2.2 Secretary to work with BGSU College of Technology to secure room location to house the event. A room in the Student Union building may also be used, but requires a request at least two months in advance. Scheduling of rooms may be worked out with the secretary of the Engineering Department or the Campus Activities office.</p> <p>2.3 Secretary to email recruitment email to selected students at BGSU.</p>

	<p>2.4 Leadership team and support member to provide an agenda for the event at least one week in advance.</p> <p>2.5 Hold recruitment event, discuss the functions and benefits of the branch, and answer questions as necessary.</p> <p>2.6 Provide students contact information if questions should arise after the end of the event.</p>
3.	<p>3. Follow-up</p> <p>3.1 Student branch leadership group to meet and discuss outcomes of the recruitment activity.</p> <p>3.2 Student branch leadership group to evaluate effectiveness of event and record for future referencing.</p> <p>3.3 Secretary to record all information and house at designation retention location.</p>
Revisions	
001	Creation – SKM, 05-08-2015



BOWLING GREEN STATE UNIVERSITY
American Society for Quality (ASQ) Student Organization

May 8, 2015

General Information	
Document Title	Bowling Green State University American Society for Quality Student Branch University Requirements for Student Organizations
Doc. No.	003
Date of Creation	May 8, 2015
Author	Sara K. Murphy
Revision Level	001 - Creation
Overview	
Background	The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies. The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.
Purpose	The purpose of the development of this document is to outline the requirements from the BGSU standpoint.
Definition of Terms and/or Abbreviations	ASQ: American Society for Quality BGSU: Bowling Green State University
Structure and Functions	
1.	1. Requirements 1.1 Ten members are required, including a president and a treasurer. 1.2 An advisor is required. This person must be a full time faculty or staff member at BGSU. 1.3 An organization constitution that defines the organization's mission, purpose, and governing protocols. 1.4 An OrgSync account is required. This system manages all revenue and funding items.
Revisions	
001	Creation – SKM, 05-08-2015



BOWLING GREEN STATE UNIVERSITY
American Society for Quality (ASQ) Student Organization

May 8, 2015

General Information	
Document Title	Bowling Green State University American Society for Quality Student Branch Financial Processes
Doc. No.	004
Date of Creation	May 8, 2015
Author	Sara K. Murphy
Revision Level	001 - Creation
Overview	
Background	The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies. The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.
Purpose	The purpose of the development of this document is to outline the financial process requirements from the BGSU standpoint.
Definition of Terms and/or Abbreviations	ASQ: American Society for Quality BGSU: Bowling Green State University
Structure and Functions	
1.	<p>1. Requirements</p> <p>1.1 An OrgSync account is required to manage revenues and funds.</p> <p>1.2 According to the BGSU Student Handbook, “The treasurer should keep detailed financial records and make them available to members, the advisor(s), the Office of Campus Activities, as well as local, state, and federal officials upon request”.</p> <p>1.3 The organization may request funds for conducting the student organization’s activities including:</p> <p>1.3a Purchase items or pay expenses by invoice or online;</p> <p>1.3b Reimbursements for students, advisors, and staff;</p> <p>1.3c Pay for a service provider (e.g., a speaker, DJ, or sport official);</p> <p>1.3d Cover travel expenses. (Set up payments prior to traveling).</p> <p>1.3e Pay an on campus department.</p>
2	<p>2. Funding</p> <p>2.1 Revenue Funds: Non-University funds raised solely by the organization, often through collection of dues, donation, and/or proceeds from fundraising activities (e.g, bake sales).</p>

	<p>2.2 Student Budget Committee (SBC) Annual Funding: University funds allocated to student organizations for the entire year (July 1 to June 30) that can be spent according to your approved budget on items such as travel, programming and/or operating costs. (Requests are accepted only during the annual funding process.).</p> <p>2.3 Student Budget Committee (SBC) Spot Funding: University funds allocated to student organizations during the school year to cover travel, programming, and/or operating costs that emerged after the Annual Funding process has concluded. The SBC hosts Spot Funding hearings, and/or operating costs that emerged after the Annual Funding process has concluded. The SBC hosts Spot Funding hearings on a scheduled basis, and an organization may request up to \$2,000 at any one hearing.</p> <p>2.4 Coca-Cola Poring Rights Funding and/or Products: University funds/Coke products allocated to student organizations for programs that occur on campus and that are open to the entire student body. The SBC reviews requests for funding and/or product when it meets to conduct Spot Funding hearings.</p>
3	<p>3. Modifications to Funding</p> <p>3.1 Student organizations occasionally receive funding for travel, programming, and/or operating costs and later need to re-allocate those funds because of savings or change in plans. It is imperative that organizations submit appropriate budget modification information and get approval for the change before spending the funds on a new initiative.</p>
4	<p>4. Point Of Sales (POS) Machines</p> <p>4.1 Student organizations can reserve a POS machine from the Office of Campus Activities for use in almost any building on campus. These machines can be used to collect payment via credit card or BG1 funds, and the Office of Campus Activities will transfer the funds into the organization's Revenue Fund (minus a 3% collection fee for credit card transactions).</p> <p>4.2 Link: https://orgsync.com/login/bowling-green-state-university?redirect_to=%2F20511%2Fforms%2F111976</p>
5	<p>5. Housing of Information</p> <p>5.1 All information was obtained from the BGSU website: https://www.bgsu.edu/campus-activities/student-organizations/managing-finances.html</p>
001	Creation – SKM, 05-08-2015



BOWLING GREEN STATE UNIVERSITY
American Society for Quality (ASQ) Student Organization

May 8, 2015

General Information	
Document Title	Bowling Green State University American Society for Quality Student Branch Requesting of Funds Processes
Doc. No.	005
Date of Creation	May 8, 2015
Author	Sara K. Murphy
Revision Level	001 - Creation
Overview	
Background	The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies. The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.
Purpose	The purpose of the development of this document is to outline the processes associated with requesting funds from Bowling Green State University.
Definition of Terms and/or Abbreviations	ASQ: American Society for Quality BGSU: Bowling Green State University
Structure and Functions	
1.	1. Funding Options 1.1 Spot Funding 1.2 Annual Funding 1.3 Coca Cola Funding
2	2. Funding 2.1 Refer to the website for specific dates for hearings, etc. https://www.bgsu.edu/campus-activities/student-organizations/requesting-funding.html 2.2 Also refer to website for applications, etc. https://www.bgsu.edu/campus-activities/student-organizations/requesting-funding.html
001	Creation – SKM, 05-08-2015



BOWLING GREEN STATE UNIVERSITY
American Society for Quality (ASQ) Student Organization

May 8, 2015

General Information	
Document Title	Bowling Green State University American Society for Quality Advisor Responsibilities
Doc. No.	006
Date of Creation	May 8, 2015
Author	Sara K. Murphy
Revision Level	001 - Creation
Overview	
Background	The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies. The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.
Purpose	The purpose of the development and defining of the Bowling Green State University American Society for Quality Student Branch Advisor responsibilities.
Definition of Terms and/or Abbreviations	ASQ: American Society for Quality BGSU: Bowling Green State University
Structure and Functions	
1.	1. Advisor Responsibilities 1.1 Attend meetings. 1.2 Provide guidance to officers, especially the executive board. 1.3 Oversee all financial transactions. 1.4 Provide consultation concerning membership selection procedures and responsibilities. 1.5 Maintain an awareness of the activities and programs sponsored by the student organization. 1.6 Meet with leaders and officers to discuss upcoming meetings and programs, long range plans, goals, and problem solving. 1.7 Assist with officer transition and new officer training.
2.	2. Reference Information 2.1 The Advisor responsibilities can be found on the BGSU website at: https://www.bgsu.edu/campus-activities/student-organizations/advisor-resources.html
Revisions	
001	Creation - SKM



BOWLING GREEN STATE UNIVERSITY
American Society for Quality (ASQ) Student Organization

May 8, 2015

General Information	
Document Title	Bowling Green State University American Society for Quality Student Branch Organizational Constitution
Doc. No.	007
Date of Creation	May 8, 2015
Author	Sara K. Murphy
Revision Level	001 - Creation
Overview	
Background	The BGSU ASQ student branch was founded in 1998. The purpose of the student branch is to provide students from different areas of specific disciplines the opportunity to gain further knowledge of quality philosophies. The student branch utilizes a basic organizational structure to ensure decisions are made accurately and individuals are in charge to make these decisions accordingly.
Purpose	The purpose of the development of this document is to outline the requirements for the BGSU ASQ student branch organizational constitution.
Definition of Terms and/or Abbreviations	ASQ: American Society for Quality BGSU: Bowling Green State University
Structure and Functions	
1.	1. Name of the organization 1.1 Includes the name of the organization and preferred acronym. 1.2 “Bowling Green State University” or “BGSU” should not be included in the official organization name. 1.3 Include the ASQ student branch logo, if desired.
2.	2. Affiliation with other groups 2.1 Include all affiliated organizations – i.e. ASQ, Toledo Section.
3.	3. Mission, Goal, Purpose 3.1 Include the mission statement. 3.2 Ensure the mission statement is clear and precise (30 words, or less). 3.3 Include the organization’s philosophy and goals.
4.	4. Membership Requirements 4.1 Specify whether non-students can be members. 4.2 Statement of voting rights on members. 4.3 Membership must be open to students of BGSU without regard to sex, gender identity, genetic information, gender expression, sexual orientation, race, color, religion, ancestry, national origin,

	<p>marital status, disability, pregnancy, military status, age, or status as a Special Disabled or Vietnam-era veteran.</p> <p>4.4 Identify the process of removing a member.</p> <p>4.5 Outline the appealing process for any members who are removed.</p> <p>4.6 Outline the process for reinstating a member.</p>
5.	<p>5. Officers</p> <p>5.1 List the officer positions and titles.</p> <p>5.2 Include a comprehensive list of officer responsibilities.</p> <p>5.3 Identify the length of time officers serve (include the number of terms an officer can serve).</p> <p>5.4 Identify the process of removing an officer.</p> <p>5.5 Outline the appeal process for an officer who has been removed.</p> <p>5.6 Outline the process for reinstating an officer.</p> <p>5.7 Describe the process of an officer resigning.</p> <p>5.8 Define the procedure(s) for officer vacancies.</p> <p>5.9 Identify if an officer can hold multiple positions and explain these circumstances.</p> <p>5.10 Define the officer voting rights.</p>
6.	<p>6. Selecting Officers / Elections</p> <p>6.1 Describe the process of selecting officers and the timing of this process – i.e. frequency of selection, term, etc.</p> <p>6.2 Describe the nomination / election process.</p> <p>6.3 Define the absentee ballots and proxy ballots.</p> <p>6.4 Define re-election of officer to same position.</p> <p>6.5 Define the procedure for a tie vote.</p>
7.	<p>7. Faculty / Staff Advisor</p> <p>7.1 Include a comprehensive list of Advisor responsibilities.</p> <p>7.2 Specify the length of time the advisor serves.</p> <p>7.3 Define the process of selecting a new advisor.</p> <p>7.4 Define the process of changing advisors.</p>
8.	<p>8. Meetings</p> <p>8.1 Identify how and who can call official meetings.</p> <p>8.2 Define the requirement for advanced notice prior to meetings.</p> <p>8.3 Define the minimum number of people in attendance required to conduct an official meeting and the voting on motions.</p> <p>8.4 Define the frequency of official meetings.</p>
9.	<p>9. Finances</p> <p>9.1 Define applicable membership dues and the frequency of payment.</p> <p>9.2 Define any exemptions of paying dues.</p> <p>9.3 Define specific authorities who are authorized to spend organizational monies.</p>

	9.4 Outline a clear process for disposing of assets and debts belonging to the student organization should its registration with the University lapse for six (6) or more consecutive months.
10.	10. Committees (if any) 10.1 Identify provisions for the formation of committees. 10.2 Define the operational functions of the committee and who they report to. 10.3 Acknowledge and describe any standing committees.
11.	11. Amendments and Ratification 11.1 Describe the process of changing or amending the constitution. 11.2 When will the changes take effect.
*NOTE	<p>*NOTE: All information was obtained from the BGSU website. Please use the following link to determine any additional items needed: https://www.bgsu.edu/campus-activities/student-organizations/resources.html</p> <p>Also, the embedded document is a checklist that was used in the creation of this document. Please use the link above to access the most recent to</p> <div> </div> <p>Constitution-Check list_2015.pdf</p> <p>ensure compliance.</p>
Revisions	
001	Creation – SKM, 05-08-2015

APPENDIX F: MAINTENANCE DOCUMENT

BGSU ASQ Student Branch Maintenance System								
Documentation Number	Documentation Title	Date of Creation	Date of Revision	Comment(s) for Revision	Quarterly Review?	Date of Quarterly Review	Date of Next Review	PIC
001	Bowling Green State University American Society for Quality Student Leadership Structure	14-Apr-15	14-Apr-15	CREATION	NEW	N/A	Jan-15	SARA MURPHY
002	Bowling Green State University American Society for Quality Student Branch Recruitment Activities	8-May-15	8-May-15	CREATION	NEW	N/A	Jan-15	SARA MURPHY
003	Bowling Green State University American Society for Quality Student Branch University Requirements for Student Organizations	8-May-15	8-May-15	CREATION	NEW	N/A	Jan-15	SARA MURPHY
004	Bowling Green State University American Society for Quality Student Branch Financial Processes	8-May-15	8-May-15	CREATION	NEW	N/A	Jan-15	SARA MURPHY
005	Bowling Green State University American Society for Quality Student Branch Requesting of Funds Processes	8-May-15	8-May-15	CREATION	NEW	N/A	Jan-15	SARA MURPHY
006	Bowling Green State University American Society for Quality Advisor Responsibilities	8-May-15	8-May-15	CREATION	NEW	N/A	Jan-15	SARA MURPHY
007	Bowling Green State University American Society for Quality Student Branch Organizational Constitution	8-May-15	8-May-15	CREATION	NEW	N/A	Jan-15	SARA MURPHY